Bell Atlantic

1300 I Street, Suite 400W Washington, DC 20005 202 336-7888 Fax 202 336-7922 E-Mail: susanne.a.guyer@BellAtlantic.com Susanne Guyer Assistant Vice President Federal Regulatory

EX PARTE OR LATE FILED



January 20, 1999

Ex Parte

Ms. Magalie Roman Salas Secretary Federal Communications Commission The Portals 445 12th Street, SW Washington, DC 20554

RECEIVED

JAN 2 1 1999

PROGRAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Re: <u>CC Docket 98-147, Deployment of Wireline Services Offering</u>
Advanced Telecommunications Capability

Dear Ms. Salas:

Today, Mr. E. Young III and I, representing Bell Atlantic, met with Commissioner Ness and Ms. L. Kinney, Legal Advisor to Commissioner Ness. The purpose of the meeting was to explain Bell Atlantic's positions in the above-referenced proceeding.

Attached are the materials used as a basis for discussion by the Bell Atlantic representatives during the meeting.

In accordance with Section 1.1206(a)(1) of the Commission's rules, an original and one copy of this notice are being submitted to the Secretary.

Sincerely,

attachment

cc: Commissioner Ness

anne Luyer (185)

L. Kinney

No. of Copies rec'd O+ List ABCDE

RECEIVED

JAN 2 1 1999

PRIDERAL COMMISSION COMMISSION OPPICE OF THE RECPETORY

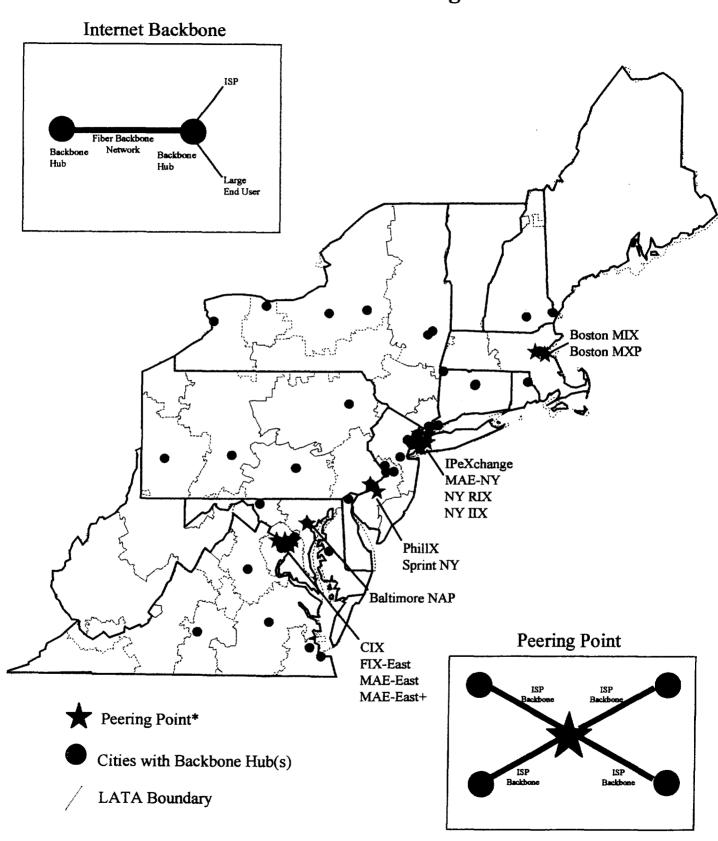
THE CASE FOR LIMITED INTERLATA RELIEF FOR INTERNET PROTOCOL NETWORK BACKBONES IN BELL ATLANTIC'S REGION

EX PARTE PRESENTATION TO THE FEDERAL COMMUNICATIONS COMMISSION JANUARY 11, 1999

Background: Internet Backbones

- There are two major components of long-distance Internet backbones. Figure 1.
 - 1) Backbone networks: fiber-optic pipes that carry Internet traffic.
 - 2) Backbone hubs: nodes at which ISPs connect to Internet backbone networks.
- Backbone networks connect to each other at "peering points."
 - Historically, all Internet traffic was exchanged under free peering arrangements – <u>i.e.</u>, backbone operators agreed to accept at no charge the traffic of all other backbone operators and ISPs.
 - The largest Internet backbone providers have terminated free peering with all but themselves; smaller backbones and ISPs must now pay large interconnection fees.
- Backbone networks and peering points are operated independently from the public switched telephone network.
 - Packet-switched Internet Protocol (IP) network backbones are completely separate from circuit-switched voice networks.
 - ISPs, not ILECs, provide the point of entry to Internet backbones. There is no comparable intermediary for long-distance voice traffic.

Figure 1. Internet Backbones and Peering Points in Bell Atlantic's Region



Source: Boardwatch Magazine's Directory of Internet Service Providers, Winter 1998-Spring 1999.

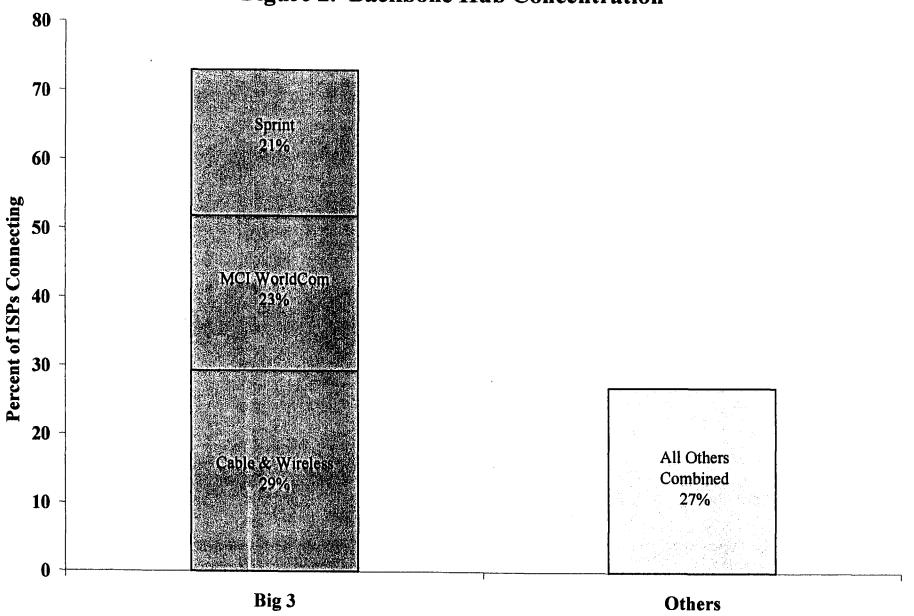
*Note: Does not necessarily include all peering points, many of which are privately operated and whose locations are not publicly disclosed.

Internet Backbones Are Highly Concentrated

- Internet backbones are concentrated among three major providers:
 MCI WorldCom, Sprint, and Cable & Wireless (which acquired
 MCI's network). Other backbone providers form a distant second tier.
 - For example, over 70 percent of all ISPs connect to the Internet through the hubs of the three top tier backbone operators. Figure 2.
 - 26 of the 41 LATAs in Bell Atlantic's region contain two or fewer backbone hubs.
- The only other likely entrant into the top tier is AT&T, which recently paid \$5 billion for IBM's backbone network. This acquisition by AT&T, which already was building its own backbone network, further concentrates an already concentrated market. In addition, AT&T (which is acquiring cable giant TCI and negotiating a venture with Time Warner) has announced that it will provide the IP network backbone for @Home.

Figure 2. Backbone Hub Concentration

Trava - Barria



Source: B. McCarthy, Introduction to the Directory of Internet Service Providers, Boardwatch Magazine's Directory of Internet Service Providers, Winter 1998-Spring 1999, at 4. Chart represents share of 6,639 Backbone connections by 4,855 Internet Service Providers.

The Termination of Free Peering Will Further Concentrate the Backbone Market

- In Spring 1997, the largest backbone providers terminated free peering for smaller ISPs and backbone operators. The major backbone providers now typically demand high interconnection fees from smaller carriers.
 - North American Network Service Providers Association: "Peering estimates in excess of \$90,000 per month for minimal traffic exchange will require that NSPs pass this along to ISPs. ISPs will have to pass the cost along to their dial-up and dedicated customers. It is estimated that the break-even cost for a dial-up account will increase to over \$42.00 per month. With MCI and WorldCom offering dial-up at \$14.95 per month, it is certainly apparent that all of the customers will migrate to these less expensive accounts. The local and regional NSP and ISP will be unable to compete."
 - Michael Gaddis, CTO, Savvis Communications (ISP/Backbone operator): "The peering situation of today is the land of haves and have nots." 3
 - Richard Yoo, Cymitar Network Systems, (San Antonio ISP): "The rates charged by [the major providers, including MCI WorldCom, Sprint, and Cable & Wireless] have been increasing 10 percent to 15 percent every six months."
 - Business Week: "Smaller backbone providers say they often don't know why they're rejected as peers. They're afraid the big companies use secret and arbitrary criteria to deny them peering relationships, thus raising their costs and harming their service. . . . There are no industry or government standards for peering criteria." 5

Internet Backbones Are Highly Congested

- Two recent, independent studies have found acute congestion and performance problems on existing Internet backbones.
 - 1) According to Data Communications/European Network Laboratories, many Internet backbones suffer speed and quality problems.⁶
 - This study analyzes only backbone networks. It identifies problems with backbone speed, uptime, and packet loss.
 - Internet backbone speed can be as low as 176 kbps, far lower than 1.544 Mbps T1 speed.
 - Uptime can be as low as 96.86%. "Consider this: 99.0% availability is viewed as unacceptable on a T1 link; 99.9% is what corporate networkers are after."
 - Packet loss can be as high as 1 percent. "This can ultimately reduce effective per-session data rates or, in extreme cases, force sessions to time out."
 - 2) According to Keynote Systems, average throughput on the Internet is only 40 kbps, slower than a 56k modem.⁷ Figures 3 & 4.
 - This study accounts for congestion caused by backbones, routers, servers, and peering points.
 - Business Week: "Consumers will find that [local access] lines promising speeds of a megabit or more per second won't boost sluggish Web access all that much."

Figure 3. Backbone Congestion

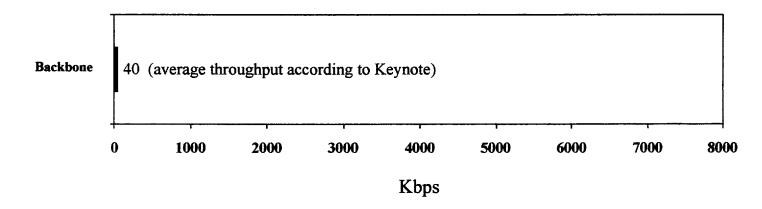
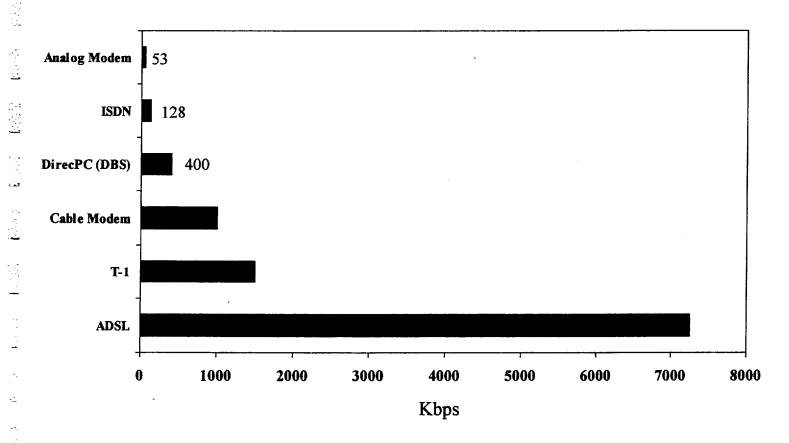


Figure 4. Potential Capacity of Internet On-Ramps



Demand for Backbone Bandwidth Is Outstripping Supply

• FCC:

- Chairman Kennard: "We must expand bandwidth capacity to keep up with ever-burgeoning demand, which is now estimated to be doubling every few months."
- Commissioner Susan Ness: "[E]xploding demand for bandwidth continues to produce scarcity."¹⁰

Major Backbone Providers:

- John Sidgmore, MCI WorldCom: "The rapid growth of Internet usage is outstripping its ability to keep pace." 11
- John Zeglis, AT&T: "A continuing problem with the Internet is that it has been slow." 12
- The fiber cables that Qwest, Level 3, IXC Communications, and others are deploying does not alleviate backbone bandwidth scarcity.
 - In order to be used as an Internet backbone, this fiber must be "lit" with costly electronics and routers, and linked to other backbone networks and peering points.
 - Few companies have the resources to acquire unlit fiber and convert it into full-scale IP network backbones.

The Requested Limited Relief

The Case for Relief

- Given the concentration of Internet backbone operators and the congestion of backbone networks, the Commission should act to strengthen existing competitors and introduce new competitors to challenge the "Big 3."
- Limited interLATA relief for IP network backbones will help to promote backbone competition and relieve backbone congestion.

The Scope of Relief

- Through a section 272 affiliate, Bell Atlantic may own and operate IP network backbone facilities that carry IP traffic on a national and international basis.
- Establishing a national (and international) LATA for IP network backbones will not materially diminish incentives to comply with sections 251 and 271.
 - The \$5 billion IP network backbone market is tiny compared to the \$100 billion long-distance market.
 - Consumers want bundles of services that include long-distance voice service, so Bell Atlantic will continue to have every incentive to obtain section 271 relief.

The Commission Has the Legal Authority To Grant the Requested Relief

- The Commission has the authority to "establish" or "modify" LATAs. 47 U.S.C. § 153(25)(B).
 - The Commission has already used this authority to promote the deployment of high-speed data services. See, e.g., Southwestern Bell Telephone Company Petition for Limited Modification of LATA Boundaries to Provide Integrated Services Digital Network (ISDN) at Hearne, Texas, FCC 98-923 (rel. May 18, 1998).
- The establishment of a single LATA for IP network backbones is consistent with Judge Greene's establishment of a single LATA for wireless and certain information services.
- The establishment of a single LATA for IP network backbones is not tantamount to forbearance of section 271.
 - Bell Atlantic will still need to obtain section 271 authority to provide interLATA voice and non-IP-based data services.

End Notes

- 1. B. McCarthy, *Introduction to the Directory of Internet Service Providers*, Boardwatch Magazine's Directory of Internet Service Providers, Winter 1998-Spring 1999, at 4.
- 2. North American Network Service Providers Association, Open Letter, available at http://www.nanspa.org/nan-open.html.
- 3. Level 3 Picks Up Peering Fight Nature and Bureaucrats Hate Vacuum says CEO, ISP BUSINESS NEWS, May 24, 1998.
- 4. S. Weiss, Internet Firms Form Alliance to Cut Costs, Improve Service, San Antonio Business Journal, June 19, 1998, at 4.
- 5. How the Internet Works: All You Need to Know, Business Week, July 20, 1998, at 58.
- 6. D. Newman and R. Mandeville, Corporate-Class Internet? Don't Count On It, Data Communications, Nov. 1998, available at http://www.data.com/issue/981107/isp.html (citing Data Communications and European Networks Laboratories study).
- 7. Business Wire, DSL and Cable Modems Will Not Solve Internet Performance Problems According to Keynote Systems, Feb. 13, 1998.
- 8. S. Wildstrom, A Little Better, A Little Faster, Business Week, Dec. 28, 1998, at 18.
- 9. FCC Chairman Kennard, Press Statement on FCC's Actions to Promote Deployment of Advanced Telecommunications Services by All Providers, Aug. 6, 1998.
- 10. FCC Commissioner S. Ness, before PCIA's PCS '98, Orlando, FL, Sept. 23, 1998.
- 11. D. Welcher, Experts Upbeat About Faster Internet, Business Times (Singapore), May 18, 1998, at 10.
- 12. John Zeglis, Speech, *Managing Knowledge with Communications Systems*, PRSA International Conference, October 18, 1998.

Bell Arlantic Network Services, Inc. 1320 North Court House Road 8th Floor Arlington, VA 22201 703 974-1200 Fax 703 974-8261 E-Mail: edward.d.young@BellAtlantic.com Edward D. Young III Senior Vice President & Associate General Counsel Legal



January 11, 1999

EX PARTE

Mr. Lawrence Strickling
Chief, Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

Re: Advanced Services Proceeding. CC Dkt 98-147

Dear Larry:

As I mentioned when we met in connection with this proceeding, exercising the Commission's authority to provide limited interLATA relief for Internet services is strongly in the public interest.

In particular, the attached presentation outlines the reasons that the Commission should exercise its authority to establish a single national and international LATA for Internet protocol network backbones. In a nutshell:

- 1. The network backbone business is highly concentrated, and is currently dominated by the Big Three of MCI WorldCom, Sprint, and Cable & Wireless (which acquired MCI's former backbone business). In addition, AT&T, which was deploying its own backbone network, recently announced that it is acquiring the backbone business of IBM, further concentrating the market. AT&T (which is acquiring TCI and negotiating a venture with Time Warner) also has announced that it will provide the IP network backbone for @Home.
- 2. The existing backbone networks for Internet traffic are plagued by congestion because demand is outstripping supply. According to Keynote Systems, the average throughput of backbone traffic is only 40 kbps, slower than a 56 k modern and more than 100 times slower that some newer on-ramp technologies such as xDSL services are capable of delivering.
- 3. Under these circumstances, it is critical to the future health and competitiveness of the Internet both to strengthen existing competitors to the network backbone businesses of the Big Three and AT&T, and to permit entry by additional competitors.

- 4. In order to do so, the Commission should permit Bell companies to provide IP network backbone services on a national and international basis. This limited relief not only will provide significant public interest benefits, but will do so in a way that does not undermine incentives to fulfill the requirements of section 271 of the Act. The IP networks are separate from the public switched telephone network, and Bell companies will still need 271 approval to enter the roughly \$100 billion general long distance business.
- 5. This limited relief also is well within the Commission's authority under the 1996 Act. In fact, the Act expressly allows the Commission to "establish" LATAs, which are defined simply as "contiguous geographic areas," as well as to "modify" existing LATAs. Here, the Commission should invoke that express authority to establish a single national and international LATA for IP network backbone services.

I would appreciate the opportunity to discuss this with you at your convenience.

Sincerely,

Deployment of Advanced Services

Bell Atlantic shares the Commission's objective to bring high-speed connections to consumers. To realize this objective, the Commission should:

- Clarify that wholesale xDSL services are not subject to a further resale discount
- Grant interLATA relief for Internet protocol network backbones
- Clarify certain technical issues to insure that complex and unnecessary regulatory dictates do not delay the availability of advanced services for consumers.

Bell Atlantic's vision for the consumer market is

- to add value to local telephone service by creating consumer friendly, competitively priced high speed connections over those lines,
- giving consumers the choice of ISPs
- to reach a competitively provided, robust Internet backbone network capable of meeting increasing consumer demand.

Separate subsidiary vs. integrated service

Bell Atlantic has concluded that to realize this vision it must offer xDSL service on an integrated basis.

- Offering DSL in a separate subsidiary adds costs, creates inefficiencies, delays and limits deployment, and ultimately results in higher prices for consumers.
- Consumers are very price sensitive.
- The cable companies have already established price points that competitors must meet or beat.

At a minimum, the FCC should make clear that when xDSL services are offered on an integrated basis:

- That resale discounts do not apply to the sale of xDSL services to ISPs because such services are wholesale and not retail services.
 - a) The Act's resale discount provision does not apply to these kinds of wholesale arrangements; it applies only to retail services.
 - b) This clarification makes sense because it will help encourage ISPs and others to resell xDSL at retail.
 - c) The same tariffed discounts are available to all ISPs and CLECs who offer the service at retail.

InterLATA relief

In order to realize its vision for high speed Internet connections to all Americans, the Commission should look not just to consumers' high speed access to the Internet, but should also consider the viability of the current Internet backbone.

- High-speed access to the Internet is only as fast as the slowest speed of any point on the Internet backbone.
- Existing Internet backbone is congested and has an average throughput of only 40 kbps, according to Keynote Systems.
- FCC should grant Bell Atlantic limited interLATA data relief to build and operate IP network backbones in competition with the Big Three providers: MCI Worldcom, Sprint and Cable & Wireless.

- Commission has authority under the Act to "<u>establish</u>" LATAs, which are defined simply as "contiguous geographic areas," as well as to "modify" existing LATAs.
- Commission should invoke that express authority to establish a single national and international LATA for IP network backbone services.
- At a minimum, the Commission should not preclude ILECs from petitioning for relief on a case by case basis.

Other technical and operational issues

The Commission should refrain from:

- adding artificial costs to the ILEC offering of xDSL services;
- redefining Section 251 requirements; and
- imposing increasingly intrusive regulation on the carrier interconnection process.

Imputation of Loop Costs

- Requiring ILECs to impute the full loop cost to xDSL service when it is provided over the same loop used to provide local exchange service would force a double recovery of loop costs.
 - a) When an ILEC uses a loop to provide local exchange service, it recovers the cost of the loop through the rates for local exchange and exchange access services.
 - b) Imputing the full loop cost to xDSL service would effectively cause those costs to be recovered a second time.
- Imputing any loop cost to xDSL service violates the Commission precedents requiring that rates be set on the basis of incremental cost.
 - a) When xDSL service is provided over the same loop that is used to provide local exchange service, there is no incremental loop cost.
 - b) Imputing loop costs to xDSL service in these situations would force pricing of xDSL service on something other than incremental cost.

Subloop Unbundling

- There is a wide range of network configuration points at which the loop might conceivably be unbundled into subloop elements. Each of these points involves unique operational and technical challenges because of geographical and physical conditions.
- ILECs should not be generally required to implement subloop unbundling at any theoretical points until competing carriers:
 - a) identify the points and locations at which they wish to access subloop elements;
 - b) agree to cooperate in the development of coordinated operational procedures; and
 - c) negotiate an agreement for access to subloop network elements under the negotiation and arbitration procedures laid out in the Act.
- ILECs should be able to recover the cost of developing the capability of making subloop elements available on an unbundled basis at each point requested by a competing carrier.

Spectrum Unbundling

- A loop is a network element; spectrum on a loop is not.
 - a) The Act defines a "network element" as "a facility or equipment used in the provision of a telecommunications service." A loop is a facility; spectrum on a loop is neither a facility nor equipment.
 - b) The Commission has already found that "[f]or some elements, especially the loop, the requesting carrier will purchase exclusive access to the element for a specific period, such as on a monthly basis." Giving other carriers access to spectrum on a loop would violate the loop purchaser's right to exclusive access.
- Requiring spectrum unbundling or "loop sharing" would take away the "carrot" to compete for local residential voice services.
 - a) If carriers can obtain access to spectrum on a loop at little or no charge, they will have absolutely no incentive to build their own competing local facilities or to offer competitive voice services to consumers.
 - b) ILECs and new entrants that have invested in their own loop facilities would be at a competitive disadvantage because they alone would have to offer a variety of services to recover the full cost of the loop.
 - c) Allowing new entrants to use another carrier's loop facilities to provide only xDSL services and avoid the full cost of the loop would give these new entrants an artificial advantage over the competitors that have already invested in loop facilities.
- Spectrum unbundling or "loop sharing" should be required only to the extent an ILEC shares the loop with its own affiliate.

Collocation

- Both new entrants and ILECs should be able to secure their equipment in central offices.
- When new entrants establish collocation in a place or manner that circumvents the ILEC's existing security arrangements, the ILEC should be able to recover the reasonable cost of new security arrangements from collocators.
- The Commission should not attempt to micromanage security arrangements.
 - a) For example, security cameras may be appropriate in one central office, while a separate physical room may be appropriate in another and an escort process is appropriate in a third office.
 - b) State commissions are better able to evaluate the reasonableness of security arrangements in particular situations as part of their overall responsibility to determine the availability of central office space for physical collocation.

NEWS RELEASE

FOR IMMEDIATE RELEASE January 13, 1999

CONTACTS: Joan Rasmussen

Bell Atlantic 703/974-8815

Wendy Goldberg America Online, Inc. 703/265-2359

AMERICA ONLINE AND BELL ATLANTIC FORM STRATEGIC PARTNERSHIP TO PROVIDE HIGH-SPEED ACCESS FOR THE AOL SERVICE

DSL Upgrade Begins Rolling Out this Summer to AOL Members

Bell Atlantic High-Speed Technology Available in Areas Covering 14 Million Homes by End of Year 2000

DULLES, VA and NEW YORK, NY -- January 13, 1999 -- America Online, Inc. (NYSE: AOL), the world's leading interactive services company, and Bell Atlantic (NYSE: BEL) today announced a strategic alliance to provide high-speed Digital Subscriber Line (DSL) access to the AOL service.

In a significant step for the development of broadband availability, America Online this summer will start to offer Bell Atlantic's Infospeed DSL access as a premium upgrade for AOL members in Bell Atlantic's service area, as the technology becomes available in major markets.

To support this multi-year agreement, Bell Atlantic plans to make its DSL technology available in areas covering 7.5 million homes by the end of 1999, a number that Bell Atlantic expects to nearly double to more than 14 million by the end of the year 2000.

This DSL feature will provide AOL members with high-speed bandwidth to their personal computers over existing telephone wires. At a typical speed of up to 640 kilobits per second, DSL access will be more than 20 times faster than the standard 28.8 kbps modems.

In addition to high-speed access, AOL members who take advantage of the DSL option will:

- ** Gain "always on" access to AOL, as no dial-up is required for DSL users because they are always connected;
- ** Be assured of consistently high-speed access because DSL dedicates a broadband connection to each individual user:
- ** Benefit from "AOL Anywhere," the features of which include enabling broadband users to also connect to AOL when they are not at home;
- ** Experience broadband-enhanced multimedia and other services; and
- ** Be able to use their computer and telephone or fax simultaneously on a single phone line.

America Online will be announcing DSL pricing when the roll out begins this summer, but the DSL upgrade is expected to cost AOL members less than \$20 extra per month.

AOL also intends to offer a special version of the AOL software that will provide DSL users with links to a customized Bell Atlantic Web site with information on the company's products and services. The companies are planning other co-marketing directed to AOL members with DSL access. In addition, Bell Atlantic will have opportunities to offer AOL members certain optional telecommunications products and services.

James G. Cullen, president and chief operating officer of Bell Atlantic, said, "This first of its kind alliance with America Online demonstrates Bell Atlantic's commitment to becoming consumers' first choice for high-quality, high-speed data services. We're creating a mass-market model for the millennium that adds value for our customers and our company. Combining AOL's marketing clout, convenience and ease-of-use with Bell Atlantic's technological leadership will provide even more momentum to the interactive medium."

Bob Pittman, President and Chief Operating Officer of America Online, said: "This strategic partnership with Bell Atlantic, one of the world's great telecommunications companies and an industry leader in this groundbreaking DSL technology, ensures that our members will be among the first to have the opportunity to benefit from high-speed connections. This announcement marks an important advance in our commitment to offer affordable and convenient broadband access to those AOL members seeking faster connection speeds."

Mr. Pittman added: "America Online has always been committed to embracing all new technologies and features that offer our members a full range of options to enhance their online experiences. With our industry-leading membership base, we're excited about the

prospect of helping to build economically viable markets for broadband technologies. With our Bell Atlantic partnership and other alliances in the future, we together can begin to make the promise of broadband a reality for mass market consumers."

About Bell Atlantic

Bell Atlantic is at the forefront of the new communications and information industry. With more than 42 million telephone access lines in New England, New York and the Middle Atlantic states and more than eight million wireless customers worldwide, Bell Atlantic companies are premier providers of advanced wireline voice and data services, market leaders in wireless services and the world's largest publishers of directory information. Bell Atlantic companies are also among the world's largest investors in highgrowth global communications markets, with operations and investments in 23 countries.

About America Online

America Online, Inc., based in Dulles, Virginia, is the world's leader in branded interactive services and content. America Online, Inc. operates two worldwide Internet services: America Online, with more than 15 million members; and CompuServe, with approximately 2 million members. America Online, Inc. also operates AOL Studios, a leading builder of Internet brands for new market segments. Other branded Internet services operated by America Online, Inc. include AOL.COM, the world's most accessed Web site from home; Digital City, Inc., the No. 1 branded local content network and community guide on AOL and the Internet; AOL NetFind, AOL's comprehensive guide to the Internet; AOL Instant Messenger, an instant messaging tool available on both AOL and the Internet; and ICQ, an instant communication and chat technology on the Internet.

This press release contains forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. These statements address the timing of deployment, availability, new technology and pricing and benefits of DSL service. The forward-looking statements are based on management's current expectations or beliefs and are subject to a number of uncertainties and other factors (and uncertainties) that could cause actual results to differ materially from those described in the forward-looking statements. See AOL's Annual Report on Form 10-K, 10-Q's and other public tilings for additional information.